

Club Copy

**OTTO
OTTO
OTTO
PARTS**

CORVAIR

Hi-Performance Equipment &
Improvement Parts



DEDICATED TO THE
IMPROVEMENT, PRESERVATION & PERFORMANCE
OF THE CORVAIR

P.O. BOX 3212, SOUTH EL MONTE, CALIF. 91733

\$1.00

Sales Policy

Pricing:

All prices are F.O.B. So. El Monte. Prices are subject to change without notice.

Ordering:

Full payment including shipping cost should accompany order. Send money order or certified check. Personal checks will delay orders 3-4 weeks while check is cleared through our bank. We DO NOT ship C.O.D.

Shipments:

Most orders are shipped Parcel Post unless a carrier is specified. Weights shown in catalog are shipping weights, which are to be used in figuring shipping cost from schedule provided.

Statements:

Items that require instructions are supplied with thoroughly researched and clearly written instruction sheets, most of which are illustrated.

Replacement component parts for all items manufactured by Otto Parts are available. Prices on request.

Corvair Owners Club:

We feel it will be of interest to our customers to know that there is an active growing Corvair Owners Club called "CORSA" (Corvair Society of America). This club was formed in 1969 by and for those who still appreciate the Corvair automobile. This organization has many interesting activities and the monthly publication is an endless source of information for Corvair owners.

For further information write to:

CORSA 145 Ivywood Lane
Dept. B.O.P. Radnor, Pennsylvania 19087

Warranty

OTTO PARTS warrants that all parts supplied by us will perform as specified when installed properly and instructions are carefully followed. OTTO PARTS will rework or replace at our discretion any product determined by us to be faulty or defective in material or workmanship. The full extent of this warranty is the product supplied by OTTO PARTS and does not include any other loss, failure, or related damage.

Return of Merchandise:

No merchandise should be returned without first securing factory authorization. All return shipments must be sent freight prepaid insured. We will not accept collect shipments. Be sure to include complete information on the problem encountered plus name, address, and phone number.

**OTTO
PARTS**

Introduction

OTTO PARTS, Corvair Hi-Performance equipment is designed for the enthusiast who demands better performance and extended reliability from this unique engine.

Each item has been carefully engineered and manufactured from the best materials available.

While a policy to provide the highest quality product DOES NOT often yield the lowest price, it DOES always yield a more satisfied customer over a greater period of time. Fully aware that many persons always purchase lesser priced merchandise, we feel that this sacrifice is well justified to provide a superior product for those who can only be satisfied with a quality product. We will continue to be as competitive as quality and your best interests will permit.

COMPARING OTTO PARTS TO OTHER PRODUCTS

To answer some of the most frequently asked comparative questions.

Q. Why does the OTTO PARTS Ultra-cooler Oil pan cost more than other Cast Aluminum Pans?

A. Even if you overlook the first two cost factors, that are not obvious to a lay person, on first comparison. 1. Highest quality casting from premium stock. 2. A design that gives ultimate priority to, thermal transfer, not minimum production cost.

Consider these fixed cost features:

- (1) The green casting is HEAT TREATED & straightened to give durability & reliable gasket seal.
- (2) OTTO PARTS, drills & taps the hole for your oil temp sending unit. Rather than leave it for you to machine.
- (3) Sandblasted & "Black Anodized Finish", for ultimate heat dissipation.
- (4) The installation hardware kit, included with in the price of the OTTO PARTS pan. (But not offered with lesser priced pans.) Features: 1. Heat treated, shake proof mounting bolts. 2. Drain plug with gasket. 3. Pipe plug for temp sender hole, just in case you are not ready to install your oil temp gage.

Now ask yourself, what is it worth to have the ultimate pan with all machining done and all the best hardware needed, rather than chasing around for it.

Q. What about the OTTO PARTS Super-Flow Oil Pump? Isn't it the same as the others?

A. Only to the extent that the physical size of the gears are the same. In addition to the fact that all component parts are of Superior Quality, as outlined in the catalog. You receive the following, not offered by others. 1. Plasti-gage for checking end clearance. 2. Heat treated SHAKE PROOF BOLTS. 3. A new idler shaft, that is the correct length for the longer gears. 4. A tube of assembly lube, for quick priming and proper break-in of this precision pump.

OTTO PARTS could make an economy version of many of the products offered. By leaving out the improvement processing, installation aides, additional parts, (like Pan Pugs and full length idler shaft, in pump kit, etc.) and even the hardware and illustrated instructions, that make installations quick and easy.

This would make all our products as cheap as any. However, this is not the caliber product we want to base our reputation on.

**OTTO
PARTS**

ULTRA-COOLER OIL PAN

Fits all Corvairs



Scientific fin placement puts air flow to work, reducing oil temperature as much as 50°F when used with the matching rocker-arm cover set. Full 314 square inch cooling area (170% of stock area) is aided by sand blasted and black anodized finish to radiate maximum heat into the air flow. Baffle construction permits stock pick-up location, prevents pump starvation during hard cornering, and supplies coolest oil to pump. The three high baffles and 24 posts extend into the hottest layer of the oil, capturing heat and conducting it directly to the cooled exterior surface. The pan adds only one pint of oil capacity to the engine, to make an even 5 quarts, keeping the cost of changing oil to a minimum. To keep ground clearance to a reasonable figure, the pan is a mere 3/4 inch deeper than the stock pan, including the fins. At the back of the pan a 3/8" N.P.T. hole is provided with flush fitting plug installed, for quick installation of an oil temperature sending unit or dry sump attachment.



This rigid cast aluminum pan also provides a girdling effect to the split crankcase halves to reduce movement at high R.P.M. that can cause bearing interference. A must for all turbo charged and modified Corvairs, a remarkable improvement on any Corvair.

Oil pan kit includes: 1 oil pan, 1 set heat treated, cad plated, self locking, flange headed bolts, 1 drain plug w/gasket, 1 temperature boss plug. We recommend use of OTTO PARTS High Performance Oil Pick-Up, Order #OP-126 & OTTO PARTS Gasket for Cast Aluminum Covers Order #PG-111. Use of these parts insure maximum oil, cooling and long lasting seal.

| | | |
|---------------------|--------------|---------|
| Order #OS-101 | Price | \$40.00 |
| Shipping Wt. 9 lbs. | Hi-lite fins | \$ 1.00 |

The above pan is available with an additional oil temperature sending unit boss located inside the oil pick-up baffle, to monitor temperature of oil at the pick up point. This location is also less prone to dragging than rear location.

| | | |
|-----------------|-------|---------|
| Order #OS-101-A | Price | \$42.50 |
|-----------------|-------|---------|

**OTTO
PARTS**

OIL PAN, BAFFLE SPACER KIT

For all Corvair pans

This Baffle Spacer was developed by OTTO PARTS, to eliminate oil loss from the pick-up area of *all CORVAIR oil pans*. When the Corvair engine is subjected to sustained high "G" forces or extreme chassis angles the oil escapes to the cylinder head, starving the oil pick-up.

The baffle extends out over the pan and shrouds the pick-up, while the parabolic ramp diverts fast moving oil back into the pan area. The spacer with gaskets is $\frac{3}{4}$ " thick putting more of the oil below the gasket surface of the engine, where it can be effectively controlled by the baffle ramps. For best oil control we recommend you recalibrate your dip stick to the same oil volume you had *without* the baffle spacer. However, if you fill to the original full mark on the stick it will add (1) quart.

The use of the baffle spacer, also, contributes to additional oil cooling as the parabolic shroud extends out into the *hottest* oil. Exposing 54 square inches of heat conductive aluminum to the hottest oil. Unquestionably, the ultimate



solution to oil washout and pump starvation. In order to assure the best results, this baffle spacer is sold with Hi-Performance oil pick-up. You must specify the make of pan you will use, or provide measurements from gasket surface to the highest object in pick-up area.

1. Baffle Spacer (Black Anodized)
2. Hi-Performance Oil Pick-up
3. Two Gaskets, for Cast Aluminum Covers
4. Heat Treated, Self Locking Bolts

Order #BS-133

Shipping Wt. 6 lbs.

Price

\$46.50

OIL PICK-UP.....Hi-Performance



This practical and effective oil pickup is available for both the OTTO PARTS Pan and all Brand 'X' pans.

This more-functional pick-up is $\frac{5}{8}$ " closer to the pan-bottom when fitted to an OTTO PARTS pan and considerably more on deeper pans.

If you have a Brand 'X' pan (and specify the brand) we adapt the pick-up tube to that pan to obtain the benefits below.

As the cooling effect of outside air affects oil for only a limited distance, the coolest oil is obviously within the first $\frac{3}{8}$ " from the pan bottom.

The OTTO PARTS Hi-Performance Oil Pick-up promotes a more effective oil turnover in the pan because the pick-up is closer to the

pan bottom. As a result, oil cooling is increased! The relocated pick-up is even more important for deep pans, because the stock pick-up does not enhance oil turnover.

All models of the pick-up maintain this critical spacing. The configuration of the head minimizes wash-out of the oil on high "G" turns. A rigid support strut fastens directly to the pick-up head, eliminating any fatigue which might otherwise result from vibration of an unsupported structure. This strut also accurately positions the head relative to the pan bottom.

OTTO PARTS PAN

Order #OP-126 Price \$18.00

IECO or EELCO 2 qt. pan

Order #OP-127 Price \$19.00

No name 2 qt. pan (as sold by Warshawsky, Whitney and others)

Order #OP-128 Price \$19.00

Note: You must, either specify brand of pan, or measure from gasket surface to pan floor or highest point in pick-up area and submit measurement.

OTTO PARTS

Order #CB-134

Price per pair

\$ 8.00

Shipping Wt. 1 lb.

ROCKER COVER BREATHERS

High luster, polished aluminum

These attractive, competition oriented breathers are a must for modified engines. Low profile design, features polyurethane filter to keep dirt out. Unique internal oil baffle to keep oil in. While one pair of these breathers provide adequate venting, for most applications. Two breathers per cover, as shown, provides adequate venting for the all out racing engine, and gives that racey symmetrical look. This increased venting is a must for all Hi-Performance Turbo's, to eliminate back Pressure.

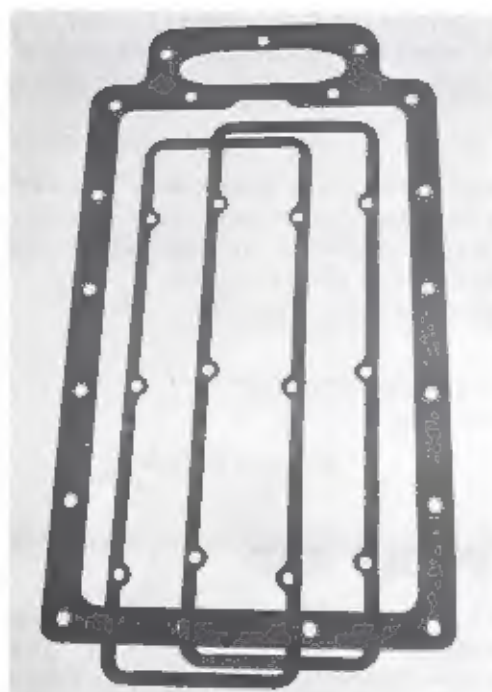
Fits OTTO PARTS & stock covers.
All Hardware & Illustrated instructions.

Order #CB-134 Price per pair \$ 8.00
Shipping Wt. 1 lb.



OIL PAN & ROCKER COVER GASKETS

For cast aluminum covers



A gasket material for use with ALL cast aluminum covers. Neoprene and cork type gaskets are for use with sheet metal type covers and are not compatible with cast covers. OTTO PARTS gaskets are 1/32" thick, they will not extrude out the sides under hi-pressure. They do not tend to harden from heat and start leaking; provides better heat conductivity from engine to cover, and in general provides a better longer lasting seal. These gaskets will also work on standard sheet metal covers if they are in good condition. Rocker covers should have the pressure clamps used on the later Corvairs and available from Chevy. (P/N 3850874)

Rocker Cover Gaskets

Order #CG-111 Price per pair \$ 2.00

Oil Pan Gasket

Order #PG-111 Price \$ 1.80

Shipping Wt. 4 oz. ea. or 6 oz. both.

OTTO PARTS

SUPER-FLOW OIL PUMP KIT



The stock oil pump in the Corvair is marginal under the best conditions and inadequate to supply the oil requirements of; increased temperatures, high RPM, increased clearances, or competition use.

This SUPERIOR QUALITY PUMP has been updated to include a full length Idler Shaft, to provide full length bearing area for the longer idler gear. A tube of assembly lube is included to insure proper break-in and long life for Highest Quality pump kit available.

The 50% longer gears provide 133% of stock pump output.

Because of the critical function of the oil pump, every part is made to very critical specifications, from the most serviceable materials available. The gears are machined racing pump gears (not powdered metal).

The spacer is machined from A Very Stable Grade Aluminum Bar Stock (not cast aluminum). The gear bores are precision bored to very close tolerance to provide optimum output. The mating faces of the spacer are precision "ground". To minimize tolerance, build up when assembled to the housing. The gear driving shaft is heat treated to provide maximum pump life. This oil pump is truly a wise investment for maximum engine life.

Super-Flow Kit Contents:

- | | |
|--|--|
| 1. (One) black anodized gear spacer. | 6. (Two) 3/32" x 5/8" "Roll-pins" for dowelling the spacer to the accessory housing. |
| 2. (One) gear set with hardened driveshaft. | 7. New idler gear shaft to match longer gear. |
| 3. (Six) 1/4-20x1" grade 5 self locking bolts. | 8. (One) tube of assembly lube. |
| 4. (One) length of PR-1 Plasti-gage. | 9. Illustrated instruction. |
| 5. (Four) gaskets .003", .005" & .008" thick. | |

Pro-Flow Pump Kit Only:

- | | |
|--|------------------------------|
| 10. Special driving gear & shaft assembly. | 11. Bearing cap, pump cover. |
|--|------------------------------|

We urge you to compare quality and kit contents before ordering.

Order #SF-108

Price

\$26.50

Shipping Wt. 1 lb. 6 oz.

PRO-FLOW OIL PUMP KIT

The Pro-Flow, Oil Pump Kit provides gear location, on both sides of the pump gears. Idler and driving shafts extend thru the gear & locate into the Bearing Bores of the OTTO PARTS pump cover. This equalizes lateral gear loads and eliminates side scrubbing in the housing. The ultimate design for long life, oil pump reliability!

Order #PF-108

Price

\$35.50

Shipping Wt. 1 lb. 10 oz.

**OTTO
PARTS**

VALVE GUIDES, ALUMINUM BRONZE



These guides are made from aluminum silicon bronze. They are headed to provide maximum stability and heat dissipation.

These guides are manufactured like any precision bushing. The O.D. is ground and the I.D. is honed to permit close tolerances to be held. The intake guides have a "flow cone" machined on the port end to promote better flow around the valve and stem.

We have found that on street-type applications, the use of these guides on the exhaust valves is very effective in balancing the wear rate with the stock intake guides. Their superior heat transfer quality is also effective in reducing "spring tension fatigue," which is aggravated by heat.

Turbo charged and high performance engines impose extreme conditions on valve gear due to demand for much greater heat dissipation than stock conditions. As the ability of a valve to dissipate this additional heat, without loss of lubrication, bears directly on the conductivity of heat to the guide, aluminum bronze is unquestionably superior to any other alloy for this use.

Precision honed bore also allows control of the stem to bore fit to a minimum "gap" across which the heat must flow. Remember that this fit gets "looser" when hot, so a tight minimum fit is essential when cold.

By taking advantage of the exclusive OTTO PARTS removal and installation method and special tools that make it easy to install your own guides. You can have the benefits of Aluminum Bronze guides for little more than the cost of having stock guides replaced at a local shop.

We suggest you do not try to remove the guides in your head until you receive the instruction sheet and tools required.

Intake Guide - Set of 6 & 1 tube ass'y. lube.

Order #IG-131 Price \$26.00

Exhaust Guide - Set of 6 & 1 tube ass'y. lube.

Order #EG-131 Price \$25.00

Shipping Wt. per set 1 lb.

Deposit on Installation Tools - \$30.00

Shipping Wt. 2 lbs.

OTTO PARTS will remove and replace these guides for you.

\$17.00 6 guides

\$25.00 12 guides

HI-PERFORMANCE STEEL INTAKE GUIDE

This is a stock guide that has been modified by OTTO PARTS to provide the following improvement features: The guide is shortened 5/16" so that when installed to give clearance for high lift cams, you *DO NOT* have an excess of bushing extending into the intake port. This also contributes to more effective lubrication and longer life. The stock guide is too long for the entire guide to receive adequate lubrication. A "Flow Cone" is machined on the end that is undercut and normally would have been installed on the spring seat side. This not only provides the benefits of the "Flow Cone", but a greater wall thickness on the un-



supported guide extending into the valve spring side. This results in better stability and longer life.

Set of 6 Guides, 1 tube of ass'y. lube.

Order #MG-131

Shipping Wt. 1 lb.

Price \$12.50

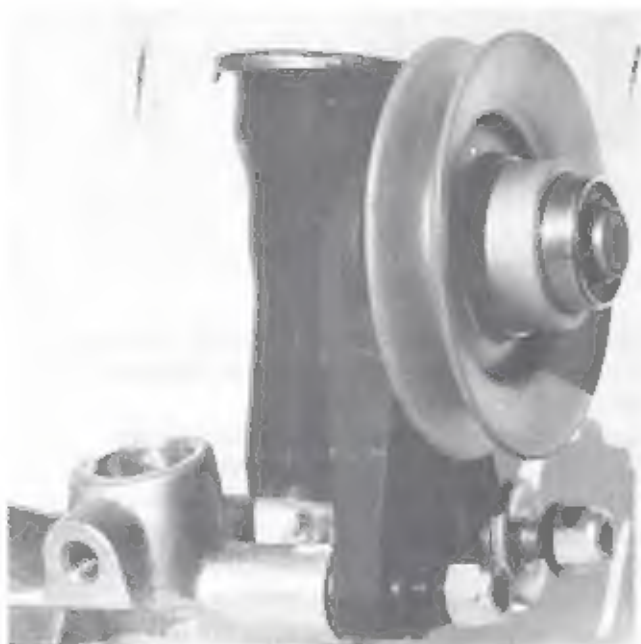
**OTTO
PARTS**

STOCK IDLER PULLEY (Rebuilt)

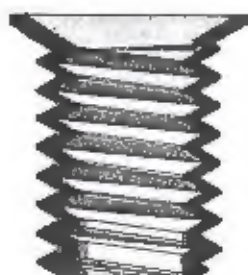
Rebuilt engine still noisy? Strange sounds from Engine? Check your Idler Pulley. This seldom checked or re-newed part is the source of many mysterious noises in the Corvair Engine.

This Idler Pulley and bracket assembly features a gold cad plated pulley and black anodized bracket. The casting flash is removed from the periphery of the bracket for appearance. These attractive plated parts are reassembled to close tolerances, with a new, heavy duty double roller bearing for maximum durability.

| | | |
|---------------------|--------------|---------|
| Order #IP-109 | Price | \$12.00 |
| Shipping Wt. 2 lbs. | Core Deposit | \$ 6.00 |



SPARK PLUG THREAD INSERTS



Trade named Time-Serts because the inside thread is timed to the outside thread providing a uniform thin wall, steel insert. As shown in illustration spark plug heat range is not altered because:

1. Thin wall design of insert.
2. Spark plug washer seals on recut aluminum sealing surface.
3. Insert is expanded into the aluminum after installation to provide maximum heat conductivity through the insert.

You can install these inserts in a pair of Corvair heads in about one hour without the use of any power tools.



The use of these inserts eliminates the risk of stripping or cross threading soft aluminum threads. This unique insert obsoletes Heli-Coil process and is much easier to install.

Installation service kit includes:

Six steel inserts and use of installation tools.

| | | |
|--------------------------------|-------|---------|
| Order #TI-110 | Price | \$ 9.00 |
| Shipping Wt. 2 lbs. with tools | | |
| Deposit on Installation Tools | | \$42.00 |

INSTALLATION SERVICE

We will install these inserts for you at our shop - Price does not include shipping costs.

| | | |
|-----------------|-------|---------|
| Order #TI-110-A | Price | \$15.00 |
|-----------------|-------|---------|

**OTTO
PARTS**

"DAMPED" SPRING LOADED IDLER KIT



This kit is **COMPLETELY** remanufactured and modified, offered ready to install without any machining operations to be done to the kit.

This idler was developed to overcome all of the disadvantages of its forerunners. Therefore, ideal for street or competition use, and ends troublesome belt jumping and belt roll over.

To develop this superior idler the following methods are used:

1. A damper was added to the spring to stop erratic pulley oscillation and vibrations. This allows the spring to function properly, and provides uniform belt tension at ALL RPM's to net the Corvair owner optimum belt bearing and pulley bracket life, along with a reliability factor never before available.
2. A spring anchor loop is fitted to the bracket so there is no change of the spring tension fatiguing the aluminum bracket.
3. The bracket is also fitted with a replaceable, bronze pivot bushing that rides on a stainless steel pivot stud to give durability.
4. Stainless steel thrust washers are placed on both sides of the pulley bracket at assembly to prevent galling of bracket and housing.
5. Wave spring washers and friction nuts maintain lateral motion for perfect belt alignment and smooth operation.
6. The pulley is "Cad" plated gold and the bracket has the casting flash dressed off and is black anodized, both for appearance and to prevent oxidation and corrosion of these parts.
7. The pulley and bracket are fitted with a **NEW IDLER BEARING** to make the idler pulley assembly.

These things are all put into a kit along with an illustrated instruction sheet and offered for \$25.00

A bargain incognito when compared to the \$14.75 your Chevy dealer wants for a stock replacement idler assembly, or the replacement parts (belts, bearings, alternators, etc.) you won't have to buy because you are using this unique product.

(Send \$6.00 core deposit, it will be returned upon receipt of your core in good condition.)

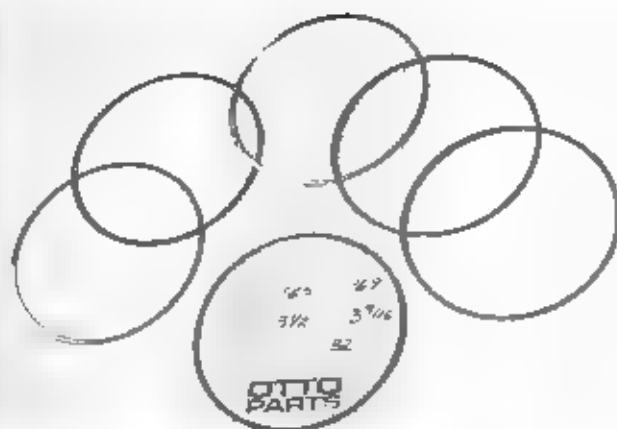
Order #IK-105

Shipping Wt. 3 lbs.

Price \$25.00

OTTO PARTS

BIG BORE HEAD GASKETS



Now available to fit all year model Corvairs, stock through 3 9/16" over bores.

These head gaskets are manufactured from solid copper and are reusable by torch annealing.

These gaskets are essential for every bored-out Corvair. Stock head gaskets should not be used because they will hang over into the increased bore size and cause detonation. Gasket and head erosion from flame exposure may occur.

Due to lower octane levels in the fuel available today, some pinging in the hi-performance and turbo charged engines is being experienced. In order to simplify a minor reduction in compression, to adjust to new fuel standards, a gasket that is .010" thicker than stock is available. Thickness is .042", stock is .032.

These head gaskets are also ideal to compensate for cylinder head resurfacing when no compression increase is desired. In many cases, .030" or more is required for a good cleanup. Due to the solid copper design you can "stack" these gaskets two high and mix or match the two thicknesses to acquire the head volume desired. This practice is also helpful when putting a turbo on hi-performance heads. Many persons overlook the fact that increased bore sizes also increase compression.

When ordering you must specify 1. year of engine. 2. bore size. 3. thickness desired. Kit includes 6 solid copper gaskets and instruction sheet.

| | | | |
|--------------------|------------|-------|---------|
| Order #HG-106 | .032 thick | Price | \$ 9.00 |
| Shipping Wt. 4 oz. | .042 thick | Price | \$ 9.60 |

HEAD NUT KIT

The flange type nuts are heat treated and cad plated. The heat treat makes them satisfactory for reuse one or two times. The cad plate retards rusting.

The stock nuts are "dead soft" and a very poor risk for reuse because the threads have stretched and will not maintain torque. A soft nut, even a new one, will stretch the threads and relax head torque under operating conditions, stress, heat and normal engine movement under load. A blown head gasket is generally blamed on anything but the fasteners, while this is the most likely cause for this failure. Don't risk an otherwise fine engine rebuild to cheap or fatigued hardware.

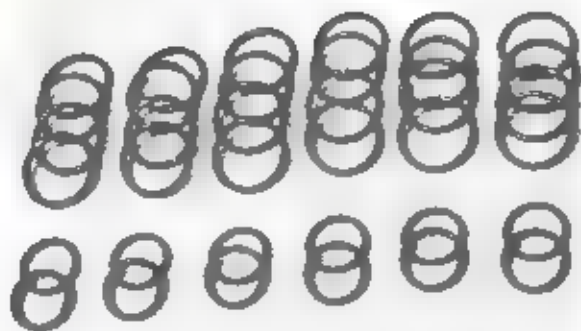


Kit includes 12 flange type nuts, enough for one complete engine.

| | | |
|--------------------|-------|---------|
| Order #HN-107 | Price | \$ 4.50 |
| Shipping Wt. 6 oz. | | |

**OTTO
PARTS**

"O" RING SEALS, PUSH ROD TUBES



These "heat resistant" "O" rings are of a specific compound of Viton selected to meet the requirements of the Corvair. They have a critical heat factor rating that is well above temperatures your engine will reach. These seals have been field tested under extreme conditions without failing. A real labor saving investment when compared to the work involved in replacing stock type seals.

Kit includes 36 "O" ring seals, 24 large for push rod tubes and 12 small for lower head stud seals. Does one complete engine.

Order #RS-114

Price

\$13.50

Shipping Wt. 3 oz.

HI-PERFORMANCE GASKET SETS

This gasket set is a composite of the special gaskets and seals offered by OTTO PARTS and the standard gaskets required to make a complete set. (Either a head set, or rebuilding set.) Considering that anyone who might be doing a complete rebuild or valve grind on their Corvair will need the appropriate gasket set to reassemble the engine, you may also want to use our special head gaskets, "O" rings, rocker cover and oil pan gaskets. So you would have to discard those standard gaskets purchased in the gasket set. In order to avoid this inconvenience and waste of money we have combined the two, forming the OTTO PARTS Hi-Performance Gasket Set.

Head Set

Order #HS-112

Price

\$28.50

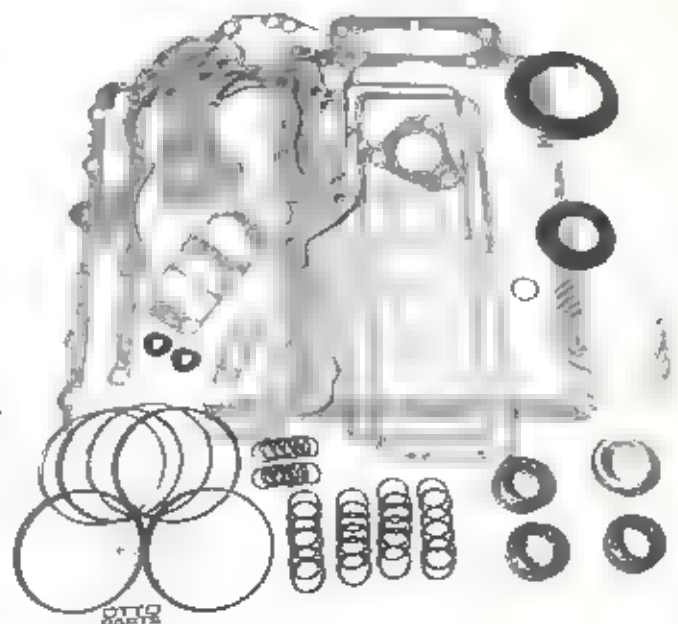
Rebuild Set

Order #RS-112

Price

\$37.50

Shipping Wt. 2 lbs.



**OTTO
PARTS**

OMEGA OIL For air-cooled engines

The only motor oil on the market today that is *specifically Formulated, For Air Cooled Engines.* Trade named Aer-Omega.

Aer-Omega is manufactured from the highest grade *Paraffin Base Lube Stock* Refined thru a unique Thermal-Vacuum process. Combining this extreme heat process and sub-micronic filtering to, remove all crude impurities and heat treat the oil for maximum stability under all conditions. Endurance tested and race proven.

ADVANTAGES OF AER-OMEGA OVER ORDINARY MOTOR OILS.

1. Greater engine life through better lubrication.
2. Less oil pressure drop @ high temp readings due to heat treating process and special formulation.
3. Aer-Omega lasts up to twice as long as ordinary motor oils, due to high purity and special formulation.

Available in S.A.E. 30, 40 & 50. This oil is

shipped by truck. It will come freight collect, terminal pick-up. Order two cases & save 50% on shipping.

You must specify S.A.E. weight preferred. Sold only in 24 qt. case.

Order #AO-113 Aer-Omega
Shipping Wt. 53 lbs. Price per case \$20.64

OTHER OMEGA OILS AVAILABLE

Speed-Omega, formulated racing oil, provides maximum protection for all out racing engines. Compatible with exotic racing fuels.

Available in S.A.E. 30, 40, 50 and 30-50. Sold only in 24 qt. case.

Order #SO-113 Speed-Omega
Shipping Wt. 53 lbs. Price per case \$25.20

Omega, Racing Gear Oil #60 weight, compatible with posi-trac. Reduces friction, improves shifting speed and E.T.

Order #GO-113 One gallon can
Shipping Wt. 8 lb. 8 oz. Price \$ 6.50



LUBRICANTS



ASSEMBLY LUBE

The product used by most leading engine builders and included with racing cams & kits, by the leading manufacturers. It is also found in the OTTO PARTS, oil pump & valve guide kits. In each case it is used with a mutual purpose. To provide maximum protection at the most critical time the first run on new parts. Assembly lube is also superior for use on infrequently serviced parts, speedo cables, control cables, distributor advance parts etc. Truly an asset to *Anyone* doing mechanical work.

Order #AL-135 2 oz. Tube
Shipping Wt. 4 oz. Price \$ 1.80

Order #AL-136 1 1/4 lb. Can
Shipping Wt. 1 1/4 lb. Price \$ 7.50



GEAR LUBE

Added to your gear oil, it provides reduced friction, for all standard transmissions & differentials. Less power loss through the transaxle, contributes to lower E.T.'s and better gas mileage.

Order #GL-138 3 oz. Tube
Shipping Wt. 8 oz. Price \$ 2.85

POSITRACTION LUBE

Provides the same benefits as the gear lube, but is formulated for the specific requirements of positraction differential.

Order #PL-139 3 oz. Tube
Shipping Wt. 8 oz. Price \$ 3.00

BREAK-IN CONCENTRATE

Provides positive protection against scuffing or galling during critical break-in period.

Order #BC-137 7 oz. Can
Shipping Wt. 1 lb. Price \$ 1.50

**OTTO
PARTS**

SIG ERSON RACING CAMS



Otto Parts makes regrinds available for prompt delivery. Due to the inconvenience and generally the long waiting time required to get your core out of the engine — Send it to a cam grinder. Decide what grind will best fill the need. Wait to get your core in the machine for regrinding, processed, inspected and shipped back. Otto Parts carries in stock all grinds listed. You can have a regrind in your possession before disassembling the engine by simply sending the core deposit along with your order.

As for the method of selecting the proper grind for your particular application, 1. you may want to specify the grind desired based on the cam you are now using 2. or you can fill in the cam selection form and we will select the proper grind for you. The latter of the two methods may be the surest way, as we have had considerable experience with the application of all the different grinds.

REGRIND POLICY: You must specify the year model engine the cam is for. If you order a '64 or later cam only a '64 or later core will be accepted. Credit for additional cores will be considered on request. All cores are subject to receiving inspection and accepted as good sound cores, at our discretion. Otto Parts reserves the right to replace any core not returned within 30 days of original shipment in lieu of core deposit. Should you be dissatisfied for any reason with the grind received, Otto Parts will exchange it for the grind of your choice with a service charge of 50% of list price within 90 days of original shipment.

| Grind Number | Timing | Valve Clearance | Valve Lift | Duration | General Characteristics |
|--------------|----------------------------|-----------------|-------------|------------|--|
| 110H | O 26 IC 66 EO 66 EC 26 | .000 000 | 430 | 272 | Idea replacement for stock hi-performance cam. Improves midrange power. O.K. for Powerglide. |
| 130H | O 31 IC 71 EO 71 EC 31 | .000 000 | 450 | 282 | Good all around cam for stick shift. Works well on the street with 4x1 or greater carburetion. A good cam for turbos. |
| 135H | IO 31 C 71 EO 80 EC 42 | .000 000 | 450 .450 | 282 302 | Broad power range cam. O.K. for street with 3.55 or deeper gears & 4x1 or greater carburetion. Excellent for s/salom, dune buggy, etc. |
| 140H | IO 42 C 80 EO 80 EC 42 | .000 000 | 450 | 302 | For the built engine only, must have carbs, low gears. Works best with 140 heads. Good for drags, road racing, etc. |
| 500H | IO 45 IC 85 EO 85 EC 45 | .000 000 | 480 | 310 | All out racing only, must have low gears, multi carbs, 140 heads. Light weight. Terrific top end power. Ground on proferal billets only. |

| | | | | |
|---------------|-----------------------|------------------|-----------|---------------------|
| Order #RG115 | Regrind | 1 TUBE MOLY LUBE | \$45.00 | Shipping Wt. 5 lbs. |
| | Core deposit | | \$10.00 | |
| Order #PB116 | Proferal Billet | 1 TUBE MOLY LUBE | \$85.00 | Shipping Wt. 5 lbs. |
| Order #HT117 | 12 Hydraulic Tappets | | \$42.00 | Shipping Wt. 3 lbs. |
| Order #DS118 | 12 Damper Springs | | 19.50 | Shipping Wt. 2 lbs. |
| Order #AR119 | 12 Aluminum Retainers | | 12.00 | Shipping Wt. 5 oz. |
| Order #VL120 | 12 Pair Valve Locks | | 1.50 | Shipping Wt. 3 oz. |
| | 24 Valve Spring Shims | | | |
| | 1 Tube Moly Lube | | N/C w/kit | |
| Order #CK-121 | Cam Kit | | \$75.00 | Shipping Wt: 5 lbs. |

Special additional heavy duty train components recommended for the competition engine

| | | | |
|---------------|----------------------------------|---------|--------------------|
| Order #TL 122 | 12 Pair Heat Treated Valve Locks | \$ 6.00 | Shipping Wt. 5 oz. |
| Order #LN 123 | 12 Pos. Locking Nuts | 12.00 | Shipping Wt. 6 oz. |

**OTTO
PARTS**

CYLINDER SPACERS (Late crank to early engine)



FOR ADAPTING A '64 OR LATER CRANK
TO 60-63 ENGINE.....

This kit includes six cylinder spacers and one seal spacer. The cylinder spacers are made of aluminum, precision machined and ground both sides to provide exact positioning of each cylinder. The seal spacer is to position the seal over the correct area on the crank (see FS-104).

Order #CS-132

Price

\$16.50

Shipping Wt. 8 oz.

FLYWHEEL HOUSING SPACER

This seal spacer is required when installing the 1964-69 "long stroke" crank into a 1960-63 engine. The spacer is placed onto the seal prior to installation of the seal in the housing. Use of the spacer places the seal over the appropriate area on the crankshaft.

Order #FS-104

Price

\$ 3.00

Shipping Wt. 2 oz.



CYLINDER HEAD, ADAPTOR SLEEVES

FOR ADAPTING A '65 & LATER HEADS
TO 60-64 ENGINES.....

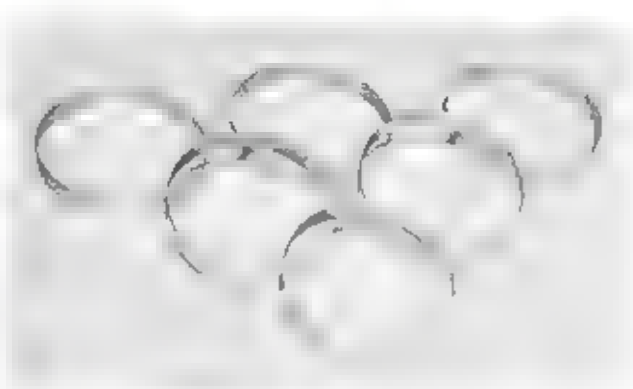
These sleeves are absolutely essential to adapt late heads to early engines. These unique precision sleeves can be permanently installed in the heads without any special tools. Kit includes 6 sleeves and instruction sheet.

Order #AS-130

Price

\$18.00

Shipping Wt. 6 oz.



**OTTO
PARTS**

SPYDER EXHAUST WRAP KIT

(Fits all models)

Every Corvair Spyder owner can have 15 more horsepower when he needs it at low RPM - by simply installing this inexpensive exhaust-wrapping kit. Jet-aircraft type ceramic-fiber insulation protects the exhaust system from the cooling-air blast under the car, keeping the exhaust gasses hotter so that they really put that turbo supercharger to work at much lower speeds than with the stock unwrapped exhaust. You can FEEL the difference! A rugged aluminum outer cover holds the insulation in place and protects it from the elements. Simple aluminum clamps are used for the 30-minute installation. Nothing complicated about it. This kit absolutely obsoletes old-fashioned and inefficient asbestos-type wrapping.

Spyder Exhaust-Wrap Kit (Fits all Corvairs) complete with instructions

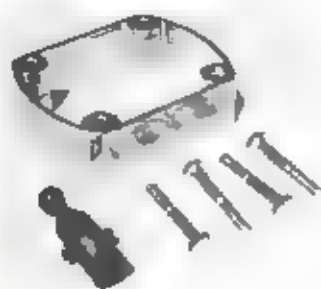
Order #WK 103

Shipping Wt. 1 lb.

Price \$20.00



QUICK SHIFT KIT



Reduces shift lever travel on all 3 & 4 speed Corvairs. Provides that quick, positive action that makes shifting a pleasure. The polished aluminum spacer is a rugged die cast part. The shift extender & bolts are heat treated for durability. Instruction sheet included.

Order #QS-141

Shipping Wt. 1 lb.

Price \$ 9.00

SUPER BOLT, CRANK HUB



This is a new crankshaft hub that has been drilled and tapped for 3/8-24 bolts. This modification is a must for all Hi-performance use, even street type 140's and turbos. Kit includes 1. Modified hub. 2. 6 grade-8 bolts. 3. 6 heavy duty stainless washers, to replace stock washer ring.

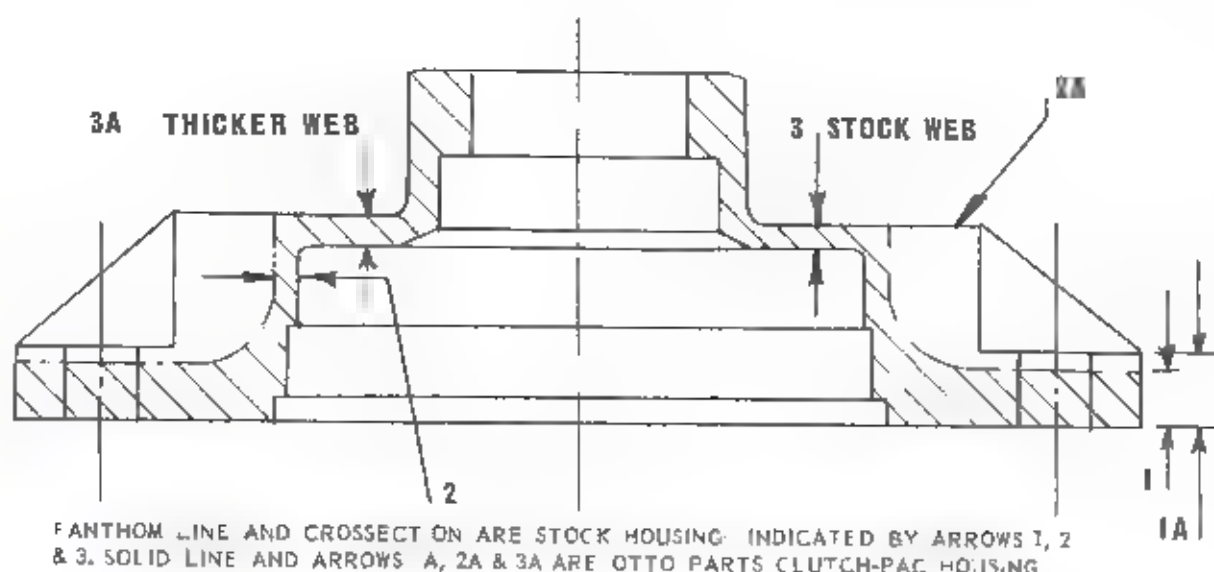
Order #CH-142

Shipping Wt. 2 lbs.

Price \$21.50

**OTTO
PARTS**

POSITRACTION CLUTCH-PAC HOUSING



Machined from solid stock

It is the CLUTCH-PAC housing that is *most* prone to failure when subjected to extreme torque and high shock loads. Under these severe stress conditions the stock housing deflects and eventually fatigues and breaks. In the meantime this deflection causes improper tooth contact between ring and pinion, which results in undue wear and breakage of the ring and pinion. After carefully evaluating these failures, OTTO PARTS has developed a CLUTCH-PAC housing that has proven to be bullet proof in testing.

It has survived one year of competition without failure, in a car that could break a stock housing at one event. The superior performance of the OTTO PARTS CLUTCH-PAC housing is achieved by starting with a material that is considerably stronger. The housing is designed for maximum strength, as indicated by illustration comparing a stock housing to an OTTO PARTS housing. Major strength improvements are indicated by arrows.

It is also of benefit to consider that a standard open differential, can be converted to a positraction, by using the OTTO PARTS CLUTCH-PAC HOUSING your spyder gear carrier and the following Chevy Parts

1. Spyder Gear, All P/N 3870781
2. Clutch Set all P/N 3820114
3. Adjusting sleeve, side bearing, Early P/N 3781396 "65" or later P/N 3867365.

You can also update an early carrier to a late, by transfer drilling six holes. The early & late bolt circles have three common holes. Specify early (6 Bolt Housing) or "65" - later (9 Bolt Housing)

Order #PH-143

Shipping Wt. 6 lbs.

Price \$75.00

POSITRACTION PRELOAD SPACERS

For adjusting CLUTCH-PAC preload. Includes two spacers, one plus .005" one minus .005".

Order #PS-144

Shipping Wt. 8 oz.

Price \$ 4.50

**OTTO
PARTS**

AUXILIARY GAS TANK Fits all Corvairs

The OTTO PARTS auxiliary tank is easily installed. Designed to mount in the trunk, on the ledge that is seldom used for storage. The tank features eleven gallon capacity. Internal Baffle to control sloshing. A vent hose that is connected to the stock vent tube by a tee fitting, so there are no gas odors. The large filler neck is inside the trunk, so there are no holes to cut in the body and no **TELL TALE** extra gas caps outside to invite theft. Tank selection is by electric selinod. The switch is dash mounted for instant change over.

There is an optional, fuel level sending unit that operates the stock gas gage. Wired thru the selinod switch, it automatically indicates fuel level of tank in use.

Auxiliary Gas Tank kit Includes:

- | | |
|---------------------------------------|----------------------------------|
| 1. Eleven gallon tank (painted black) | 4. All hose, fittings and clamps |
| 2. Electric selinod | 5. All mounting Hardware |
| 3. Selector Switch | 6. Illustrated instructions |



Order #GT-146

Shipping Wt. 37 lbs.

Price

\$94.50

FUEL LEVEL SENDING UNIT

Order #SU-147

Shipping Wt. 1-lb.

Price

\$15.00

HOW TO HI-PERFORMANCE BOOKS

Information you can trust

H. P. BOOKS



- How to Hotrod Corvair Engines (\$5.00)
- How to Select & Install Turbochargers (\$5.95)
- Rochester Carburetors (\$6.95)
- Holley Carburetors - Selection and Tuning (\$5.95)
- How to Hotrod Small-Block Chevys (\$5.95)
- How to Hotrod Big-Block Chevys (\$5.95)
- Baja-Prepping VW Sedans & Dune Buggies (\$5.00)
- How to Hotrod Volkswagens (\$5.95)
- How to Select, Ride and Maintain Trail Bikes (\$5.95)
- How to Tune Your Motorcycle for Performance (\$5.95)
- All about Minibikes (\$5.00)
- How to Modify Datsun Engines & Chassis (\$6.95)

Order by Book Name

Shipping: .50¢ 3rd class, Air Mail \$1.00

No charge with order.

No Corvair owner should be without this book.

ROCHESTER Carburetors

HOW TO HOTROD CORVAIR ENGINES

Quadrjet, Two B and other

How to Hotrod Corvair Engines

108 pages/288 photos-drawings/20 chapters. Tells how to get amazing performance from all 80 to 180 HP Corvairs. Covers cams, carbs, ex-hausts, heads, ignition, big bores, turbosuperchargers and simple VW/Corvair conversion details. Complete handling chapter.

OTTO PARTS

ENGINE SHROUD, FIBERGLASS

The OTTO PARTS Fiberglass Engine Shroud is an exact duplicate of the metal shroud it replaces, but weighs less than one-half as much (under 4 lbs. for fiberglass vs. over 8 lbs. for metal). The Fiberglass Engine Shroud incorporates the vertical shroud component adjacent to the distributor, as well as the vertical shrouds where the lower heater hoses are ordinarily located. The Fiberglass Engine Shroud does not have mounting, spark plug, P.C.V. dipstick, or heater holes drilled. This enables you to custom tailor the shroud to your particular engine. Since you may have milled the heads and changed the plug and mounting hole spacing, or decided to utilize a gasoline heater, we prefer to leave the hole cutting to you.

In addition to light weight, fiberglass possesses two other characteristics that are of considerable significance to Corvair owners. Fiberglass has an almost unmatched ability to muffle noise. We are sure you will be impressed by the *reduction* in engine noise that is ordinarily transmitted through the stock metal shrouding. Fiberglass is also an effective inhibitor of heat transfer, therefore, air entering the carburetors will be significantly cooler. And cooler inlet air equals more horsepower! and better mileage. It is also ideal for all off-road cars.

Order #FS-145

Shipping Wt. 4 lbs. 8 oz. Price \$25.00



DUAL FUEL BLOCK

Long life, Chrome plated



These attractive fuel blocks, allow you to route your fuel lines around the frame, instead of over a Hot Engine. Use of neoprene hose and slip end fittings eliminates concern for Stripping or Cross Threading stock steel fittings.

Order #FB-140

Shipping Wt. 1 lb. 4 oz. Price per pair \$10.00

**OTTO
PARTS**

MACHINE SERVICES LIST

Mill Heads, includes recut step and cut quench for deck clearance, cylinder clearance. per pair \$30.00

Mill & C.C. combustion chambers. Customer provides chamber volume. \$45.00

Customer provides bore, stroke and compression wanted and we calculate chamber volume. \$48.50

Polish chambers only to remove hot spots. \$18.00

Shape chamber for best flow. Polish and deshroud around valves, Mill & C.C. \$78.00

Shape Port Entree and blend for best flow, intake and exhaust. \$80.00

1-1/2" Exhaust Tubes: Machine heads to receive 1-1/2" tubes. We provide the tubing and flanges, you blend port and press in tubes. \$85.00

OTTO PARTS Blends Ports, installs tubes with flanges. Includes brackets to hold tubes. \$115.00

Spotface headnut Seats, per pair \$ 5.00

R & R valve guides, set of 6 \$17.00

R & R valve guides, set of 12 \$25.00

Micro polish valve stems and radius edge of valve head. \$12.00

Competition valve grind, also works great on the street. \$45.00

With springs installed to recommended height $\pm .020$. \$60.00

Install cylinder head adaptor sleeves #AS-130 \$10.00

OTTO PARTS PAN; Reconditioned Includes: recut gasket surface, blend in Fin damage, recut mounting bolt counterbores, sandblast & anodize. \$22.00

For New Installation Kit; Includes: 1-set self locking bolts, drain plug with nylon gasket and pan gasket for cast covers. \$ 6.00

OTTO PARTS Rocker Covers; Reconditioned same procedure as pan. per pair \$18.00

Installation Kit; Includes: 1-set self locking bolts & 1 pair gaskets for cast covers. \$ 4.00

CONNECTING RODS, LIGHTENED. Includes: Machine periphery of rod to remove forge stress and surface fractures. Remove excess metal from around large and small end of rod. Remove excess balancing weight at small end. Mag. inspect for surface fractures, balance finished rod. Reduces weight by over 60 grams. Per set on your rods. \$96.00

Should you prefer the above on new rods, we stock them. Price per set \$138.50

Shot-Peen finished rods to improve surface tension. Price per set \$15.00

Install 11/32" rod bolts. Includes: Rod bolts and resize bearing bore. Price per set \$38.50

Drill oil hole for full floating pins, to produce impulse pumping action. Price \$ 5.00

Flywheel, replace rivits with exclusive taper head bolts. Eliminates separation of 3-piece flywheel. Price \$21.00

Lighten flywheel and pressure plate assembly from 31 lbs. to 23 lbs. Includes taperhead bolts on flywheel. Price \$56.00

Crank hub on crank shaft; drill and tap for 3/8" bolts. Includes: 6 grade 8 bolts and heavy duty stainless washers, to replace stock washer ring. Price \$18.00

Install 3/8" bolts and 3 ea. dowels to key flywheel to hub. This combination absolutely eliminates flywheel separation from crank hub. Price \$24.00

Weld crank hub to crank & reface hub. We use a compatible metal, hub can be easily removed by machining. Eliminates, hub separation from crank which causes extreme valve gear damage. Price \$15.00

**OTTO
PARTS**

